Implicate

RADIO SETS CPRC-26

Modification Instruction

Supersedes Issue 1 dated 25 May 55

SUMMARY

1. This instruction details the installation of a modification record plate.

Items Affected

2. All Radio sets CPRC-26.

Action Required - Priority C

- 3. (a) By units: Submit CAFC 2149 to RCEME workshops.
 - (b) By RCEME: 2nd and 4th line workshops carry out modification upon request.

Stores Required

| 4. | COC No. | Nomenclature | Quantity |
|----|----------------|--|----------|
| | 1Z 1005997 | Modification plate | 1 |
| | 2Z/ZB/CAN 2652 | Screws, ANC, brass, RH, $2-56 \times 1/4-in$ | 2 |
| | 2Z/ZB/CAN 3223 | Nuts, ANC, brass, hex, 2-56 | 2 |
| | 2Z/ZB/CAN 0500 | Washers, shakeproof No. 1202 | 2 |

Stores removed

None

DETAIL

- 6. Carry out the modification as follows:
 - (a) Locate the web on the top of the set which carries the identifying plate.
 - (b) Locate, using a center punch, two points on the web 7/32-in from the top edge of the web, 15/8-in apart, and centrally located.

- (c) Drill two holes through the web using a No. 41 drill.
- (d) Stamp in the spaces indicated on the modification plate the numbers of modifications applied to the set. For example, if the humidity indicator card has been applied (Elec I 167 Instr 1) in addition to the present modification, the figures to be stamped would be 1 and 2.
- (e) Bolt the modification plate to the INSIDE face of the web with the heads of the bolts on the OUTSIDE of the set using the nuts, bolts, and lock washers provided.

CAUTION: ALWAYS REMOVE THE MODIFICATION PLATE TO STAMP IN A NEWNUMBER OR FRACTURE OF THE WEB MAY RESULT.

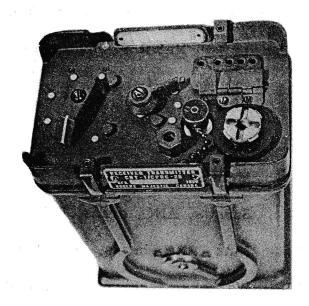


Fig 1

END

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RADIO SET CPRC 26

Modification Instruction

Cable Assembly Special Purpose

Supersedes Issue 1 dated 29 Nov 55

SUMMARY

1. It is possible to connect this cable to the battery incorrectly, resulting in excessive damage to the set. This instruction details the fitting of a guide pin bracket to the battery plug to eliminate this fault.

Time required - 1/2 man hr.

2. Items affected

12 1001156 CABLE ASSEMBLY, special purpose.

- 3. Action required Priority B
 - (a) By units with attached RC Signals radio mechanics: Carry out the modification as detailed.
 - (b) By all other units: Submit Request for Repair Services (CAFC 2149) to the nearest RCEME workshop.
- 4. Stores required

COC No.

Designation

Quantity

1 Z 1017473 GUIDE PIN ASSEMBLY, DEME No. 87932-1

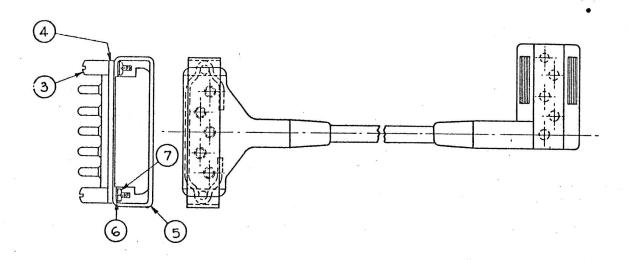
- 5. This instruction will be quoted on all demands for stores.
- 6. Stores removed

Nil

DETAIL

- 7. Referring to Fig 1, the guide pin bracket, item 5, will be modified when difficulty is experienced fitting hex nuts to screw, item 3, as shown.
- 8. Drill out the two threaded holes in bracket to take screw special using a No. 31 drill.

- 9. File one edge of nut item 7, sufficiently to allow it to fit in place as shown.
- 10. Assemble the guide pin bracket to fit on battery plug as shown in Fig 1.
- 11. Seal the exposed threads with shellac.
- 12. This modification will NOT be marked on the CPRC-26 Mod record plate.
- 13. Later productions of this bracket assembly will not require this modification.



| Item No. | Dwg No. | Description | Req'd |
|----------|---------|--------------------------------|-------|
| 3 | 87932-2 | Screw, Special No. 4 - 40 N.C. | 2 |
| 4 | 87932-3 | Spring, Clamping | 1 |
| 5 | 87932-4 | Bracket | 1 |
| 6 | | Lockwasher, No. 4 | 2 |
| 7 | II | Nut, Hex., No. 4 - 40 N.C. | 2 |

DEME 87932-1

Fig 1 - Modified cable assembly

Duplicate

RADIO SET CPRC-26

Miscellaneous Instruction

Battery Box Corrosion

- 1. The following action shall be taken by units with RC Signals radio mechanics attached and by 2nd to 4th line RCEME workshops, when corrosion is found in CPRC-26 battery boxes.
 - (a) Remove all traces of corrosion from inside of battery box, by washing in a solution of soda and water. Rinse in clear water and dry thoroughly. Brush clean with a wire brush.
 - (b) Coat the inside of battery box with clear glyptal varnish and allow to dry thoroughly.
- 2. Items required:

1H-13730/1 - Compound Insulating Wire (1 qt cans)

1H-35800 - Sodium Carbonate (lb)

- 3. Mixtures will be prepared in the proportions listed.
 - (a) Soda ash (1H-35800), 8 oz to 1 gal water

or

(b) Baking soda, 1 lb to 1 gal water

or

(c) Washing soda, 1 part to 10 parts water.

CANADIAN ARMY EME MANUAL

RESTRICTED

ELECTRICAL I 167 Instr 1

Priority B

RADIO SET CPRC-26

Modification Instruction

Supersedes Issue 2, amended as indicated by asterisk.

SUMMARY

1. This modification covers the attachment of a card which will indicate by its colour when the desiccator unit is to be changed.

GENERAL

ITEMS AFFECTED

Radio Set, CPRC-26, Serial No. 1 to 4140.

ACTION REQUIRED

3. By Units: (When the set is open for

4. By RCEME: (tuning or servicing.

TIME REQUIRED

ID 3014B

HQ 6680-1

4. Estimated, 1/4 manhours.

* STORES REQUIRED

5. See Fig 1.

STORES REMOVED

6. Nil.

DETAIL

- 7. When the set is opened, use the cellulose tape to attach the humidity indicator assembly to the side of the trimmer condenser shield (shield, radio frequency tuner) with the pliofilm next to the metal shield. Return the set to its case.
- 8. Whenever it is necessary to change the desiccator, the old humidity indicator will be discarded and replaced by a fresh one from the desiccator package. The pliofilm will be retained in all cases.

NOTE

Early stocks of desiccators were packaged without humidity indicators. In such cases, the old humidity indicator should be carefully examined and reused, if possible.

| Serial | Stock No. | Designation | Qty |
|--------|------------------|--|-----|
| 1 | 6685-21-103-7384 | INDICATOR, HUMIDITY, card, Cl | 1 |
| 2 | 7510-21-561-1930 | TAPE, pressure sensitive, adhesive 3/4 inch, PP & S 3208, 36 yd roll | AR |

Figure 1 - Stores Required

RADIO SET CPRC-26

Miscellaneous Instruction

REPLACEMENT OF ANTENNA SOCKET SEALS

- 1. The rubber seal on the antenna socket deteriorates with use and/or age.
- 2. The following action will be taken when the radio set is received by workshops.
- 3. The 'O' ring (5330-21-107-8841 Seal RU 0.800 id x 1.012 od x 0.106-in thk) must be inspected for deterioration and replaced when necessary.
- 4. Radio sets affected by corrosion should be stripped and thoroughly cleaned. The clean-

ed surfaces should be covered with a light coat of varnish (8010-21-102-5452 varnish, oil, heat, moisture, fungus resistant).

WARNING

Care must be taken that the varnish is not applied to the surfaces coming into contact with the rubber seals.

5. Further to the above, replacement of this seal should be made thereafter once in each five years of service.

(8269)

HQ 6680-1 TD 4157

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RADIO SET, CPRC 26

Modification Instruction

HANDSET H-5001A/PRC

SUMMARY

This instruction details the fitting of a new type of pressel switch when the original switch fails.

GENERAL

ITEMS AFFECTED

All Handsets H-5001A/PRC with a defective pressel switch of the old type.

ACTION REQUIRED

By Units

3. Request EME services.

By RCEME

Carry out modification.

STORES REQUIRED

See Fig 1.

STORES REMOVED

See Fig 2. 6.

DETAIL

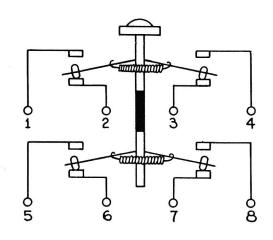
- Remove the switch retaining plate and ease the switch from the switch cavity.
- 8. Unsolder the leads from the switch.
- Replace the cable assembly (5995-21-100-1191) where any deterioration of the insulation is evident.
- Solder the switch in as indicated in Fig 4.
- 11. Position the switch in handset cavity and secure.
- 12. Test handset.

| Serial | Stock No. | Designation | Qty |
|--------|------------------|--|-----|
| 1 | 5930-21-112-5965 | SWITCH, push, non-pile-up, dpdt, 3 amp, 30 vdc (Fig 6) | 1 |

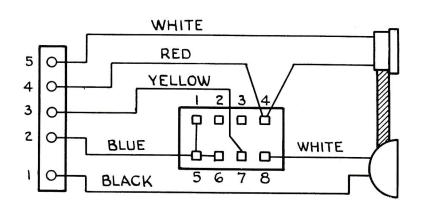
Figure 1 - Stores Required

| Serial | Stock No. | Designation | Qty |
|--------|------------------------|----------------------------|-----|
| 1 | 5930-21-116-5658 or | SWITCH, push, dpdt (Fig 5) | 1 |
| | 5930-21-106-2482 | SWITCH, push, dpdt | 1 |
| 2 | 5340-21-100-3832 | CLAMP, electrical switch | 1 |
| 3 | 5930-21-100-3831 | COVER, electrical switch | 1 |

Figure 2 - Stores Removed



DEME 89112 Figure 3 - Switch Diagram



DEME 89112 Figure 4 - Handset Diagram

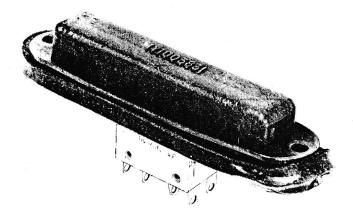


Figure 5 - Old Type

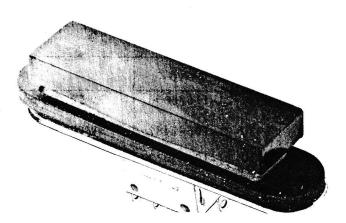


Figure 6 - New Type

END

RESTRICTED

24 Dec 65 - Issue 4

RADIO SET CPRC-26

Modification Instruction

HANDSET, H-5001A/PRC

SUMMARY

1. This instruction details a method of installing the microphone element for standard H5001B/PRC in handset H5001A/PRC. The correct microphone element is no longer obtainable

GENERAL

ITEMS AFFECTED

2. All handsets H-5001A/PRC with defective microphone elements.

ACTION REQUIRED

By Units

Request EME services

By RCEME

4. Carry out modification.

STORES REQUIRED

5. See Fig 1.

STORES REMOVED

6. See Fig 2 (to be disposed of as scrap).

DETAIL

- 7. Fabricate dummy microphone jig as shown in Fig 3.
- 8. Fabricate a suitable heating plate for softening the material of microphone cap. It is noted that some cap, electrical, plastic are made from bakelite instead of thermo setting plastic. This modification can only be applied

to thermo setting plastic material, identified by two small diagonally opposite mold marks inside cap. The bakelite cap has a smooth machined surface.

- 9. Cut a wire mesh protective disc 1 1/4 inches in diameter.
- 10. Cut a polyethylene protective disc 1 1/4 diameter. Material may be obtained from replacement microphone element packaging.
- 11. Remove old element and protective diaphragms from handset components.
- 12. Insert dummy microphone jig into handset and replace cap.

WARNING

It may not be possible to engage the threads at this time, therefore ensure that the cap sets squarely upon the handset body.

- 13. Apply silicon grease to heating plate cap and apply heat evenly to the top of the microphone cap until the material softens. Care must be taken not to apply excessive heat at this time. Screw cap home slowly, reheating as required, until the cap is fully seated. Place assembly as shown in Fig 6. Apply hand pressure and rotate to complete cap reforming. Allow cap to cool, remove burrs and polish lightly.
- 14. Remove cap and jig. Bend center making contact (Fig 4) 1/16 inch towards the center of cavity. Bend outer making contact 1/16 towards the center of cavity. Fit rubber "O" ring over new element base. Install element, wire mesh disc, polyethylene disc and modified cap in that order.
- 15. Prove handset operational.

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| Serial | Stock No | Designation | Qty |
|--------|------------------|---|-----|
| 1 | 5965-00-802-1924 | MICROPHONE ELEMENT (Roanwell type RN-1) | 1 |
| * 2 | 5975-21-100-3836 | CAP, electrical, plastic 1.69 in dia, 0.375 in 1g | 1 |
| 3 | 5335-21-108-7316 | Wire Fabric, copper 25 mesh (soft) or (alternative screening to 35 mesh of copper or brass will be acceptable). | A/R |
| 4 \ | 2805-21-113-5176 | Ring, rubber "O" type. | 1 |
| 5 | | Material to fabricate dummy microphone and heating jig in accordance with Management H 400 | A/R |

^{*} This component required only when original cap is non-serviceable or made from bakelite

Figure 1 - Stores Required

| Serial | Stock No | Designation | Qty |
|--------|----------------------------------|--|-----|
| 1 | 5965-21-100-1559 (1Y 1001559) | TRANSMITTER ELEMENT, telephone, carbon 40 ohm | 1 |
| 2 | 5965-21-100-3828 | DIAPHRAGM, microphone, 1.427 in od, 1/8 in thk | 1 |

Figure 2 - Stores Removed

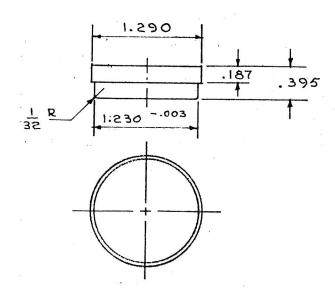
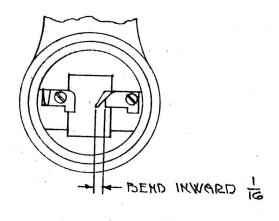
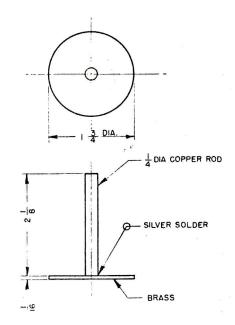


Figure 3 - Dummy Microphone Jig



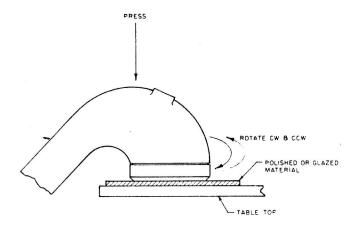
LMM 89919
Figure 4 - Contact Identification



Use in soldering iron at an operating voltage of 70 volts.

LMM 89923

Figure 5 - Heating Plate



LMM 89919

Figure 6 - Forming Cap